

# Relationship Between Sustainable Financial Services and Poverty Reduction in Nigeria. Evidence from Error Correction Model

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## ABSTRACT

The inflexibility of poverty is being met with increasing impatience from governments of diverse ideologies, donors and other international agencies. Recent data compilations show that many poor and non-poor people in many developing countries face a high degree of financial exclusion and high barriers in access to finance. Therefore, financial inclusion plays a critical role in reducing poverty. Hence, this paper examines the relationship between sustainable financial services and poverty reduction in Nigeria from 1965 - 2010 using Error Correction Model (ECM). It was observed that total value prime lending rate, financial savings, credit to private sector and rate of inflation all have significant impact on the financial deepening. In the final analysis, the study concludes that financial inclusion tends to strengthen financial deepening and provide resources to the banks to expand credit delivery thereby leading to financial development. The study therefore recommends that these findings, in turn, will inform the policy makers and stakeholders to build more inclusive financial systems.

**Keyword:** Financial Services; Poverty Reduction; Financial Inclusion; Modelling

**JEL codes:** G21,O16, 132

## 1. INTRODUCTION

### 1. 1. Background of the Study

#### **Financial inclusion**

Financial exclusion signifies the lack of access by certain segments of the society to appropriate, low-cost, fair and safe financial products and services from mainstream providers. Financial exclusion is thus a key policy concern, because the options for operating a household budget, or a micro/small enterprise, without mainstream financial services can often be expensive. This process becomes self-reinforcing and can often be an important factor in social exclusion, especially for communities with limited access to financial products, particularly in rural areas.

Two major factors have often been cited as the consequences of financial exclusion. First, it complicates day-to-day cash flow management - being financially excluded means households, and micro and small enterprises deal entirely in cash and are susceptible to irregular cash flows. Second, lack of financial planning and security in the absence of access to bank accounts and other saving opportunities for people in the unorganised sector limit

their options for providing for themselves for their old age. From the macroeconomic standpoint, being without formal savings can be problematic in two respects. First, people who save by informal means rarely benefit from the interest rate and tax advantages that people using formal methods of savings enjoy. Second, informal saving channels are much less secure than formal saving facilities. Those who can afford it least suffer the highest risk.

The resultant lack of savings and saving avenues means recourse to non-formal lenders, like money lenders. This, in turn, could lead to two adverse consequences which are:

- Exposure to higher interest rates charged by formal lenders; and
- Inability of customers to service the loans or to repay them.

In daily life, the generality of people living in rural and urban needs basic transaction services like making deposits, accessing credits for current expenses or for investment, effecting money transfers and settlement of payments. Financial inclusion means access to these basic financial services. Banks and other formal financial institutions have few branches or service outlets in rural areas, small sized transactions with the poor being costly and un-remunerative for them. Illiteracy still prevalent among adults in rural areas is also a significant barrier to their accessing financial services from formal institutions. In cities and towns migrant day laborers from rural areas face yet another barrier to accessing institutional financial services in their lack of definitive present address. Forming mutually owned co-operative societies, community/micro-finance banks was an officially supported early initiative in financial inclusion of rural and urban people of modest means in similar occupations.

## 1. 2. Why inclusive financial sector development matters

The reason for concern about widespread financial “exclusion” in developing countries is straightforward: we know that access to a well-functioning financial system can economically and socially empower individuals, in particular poor people, allowing them to better integrate into the economy of their countries, actively contribute to their development and protect themselves against economic shocks. Creation and expansion of financial services targeted to poor and low-income populations can play a vital role in enhancing financial access. It may be useful to recall that a financial sector provides critical services not only to households and enterprises, but to the economy as a whole. Broad availability of such services should be part of national development strategies for the following reasons:

- **Facilitates Payments and enhances Savings schemes:** The financial sector facilitates payments between different parties and makes them safer than cash transactions, both in theft protection as well as in proof documentation of payment.
- **Facilitates payments through allocation of resources:** The financial sector facilitates and allocates through the intermediation of savings into investment, and allows households to smooth consumption over time.
- **Provision of savings facilities:** The financial sector provides safe savings facilities and a range of risk/return tradeoffs for savers. By this, it helps households accumulate financial assets, which can provide a cushion against untoward events (“shocks”), and provides resources to respond to economic opportunities.

Financial services for poor people have been treated exclusively as part of social policy, distinct from the rest of the financial sector. Extending financial services to poor people is also part of policy for economic growth and financial sector development. Expanding and

deepening financial services for poor people should simultaneously be a concern of poverty reduction and financial sector strategies.

Access to sustainable financial services contributes directly to increasing income and reducing vulnerability for the poor. Bringing more people, and therefore more money, into the formal financial system can result to overall poverty reduction, economic growth and development, and increased stability in developing country economies.

Policymakers in developing countries have an important role to play in creating the conditions for improved access, and thereby unlocking the economic potential of their populations. The potential for economic growth and poverty alleviation through the development of a more inclusive financial services sector has been recognized by leaders in developing and developed countries and is emerging as a priority issue on political agendas.

Why are financial systems not inclusive of the poor? The World Bank, (2007) identifies two types of barriers to financial inclusion. These are:

- Supply-side barriers such as transaction costs and poor regulatory frameworks hinder the quantity and quality of financial products and services.
- Demand-side barriers restrain the capacity of individuals to access available services and products. These include socio-economic and cultural elements, challenges posed by the lack of formal identification systems, ability to track an individual's financial history, and low levels of financial literacy, in addition to the absence of appropriate consumer protection mechanisms.

Finance is at the core of the development process. Solid empirical evidence has proved that an efficient, well-functioning financial systems are crucial in channeling funds to the most productive uses and in allocating risks to those who can best bear them, thus boosting economic growth, improving opportunities and income distribution, and hence reduce poverty. Conversely, access to this finance is limited and thus denying the poor the access thus leaving much of the population in absolute poverty. The UN Secretary-General Kofi Annan in his words recognized that the stark reality in most poor people in the world still lacking access to sustainable financial services, whether it is savings, credit or insurance and that the great challenge is to addressing the constraints that exclude people from full participation in the financial sector. (UN, 2003).

This access dimension of sustainable financial services and its impact on poverty reduction is the focus of this study. Improving access and building inclusive financial systems is a goal that is relevant to economies at all levels of development. The challenge of better financial access is greater than ensuring that as many people as possible have access to basic financial services. This will enhance the quality and reach of credit, savings, payments, insurance, and other risk management products in order to facilitate sustained growth and productivity, especially for small and medium scale enterprises.

According to the United Nations, it was discovered that the size of the financially excluded population in the world which lack access to formal financial services – such as a bank account, credit, insurance, a safe place to keep savings and a secure and efficient means to receive social benefit payments; is approximately three billion. (UN, 2007a; Chibba, 2008a, c). Although this problem is universal, the financially excluded person is more often than not the average citizen in a developing country. Therefore, the study tends to critically examine the impact of financial inclusion as an important means to tackling poverty.

Consolidation could alter the credit allocation of the financial system by fostering the creation of larger banks having better access to the funds market. It also affects the availability and pricing of loans in response to changes in the market dynamics and the level

of economic development. Generally, this study is important at this level of economic development when efforts are being made to reposition the financial system to enable it play key roles in economic development of Nigeria. The study essentially seeks to examine in an empirical manner, the nature of financial deepening in Nigeria since the onset of financial reforms in 1986 up to 2010 when the banking consolidation took root in Nigeria. We shall seek to ascertain the critical factors that financial inclusion tends to strengthen financial deepening and provide resources to the banks to expand credit delivery thereby leading to financial development in Nigeria. Moreover, we shall also seek to find answers to the basic questions: Is there any relationship between the lending pattern of banks and financial deepening? Is there any relationship between the level of financial deepening and savings? Finally, we shall seek to ascertain if there is observable growth in the financial deepening index (money supply to GDP) ratio in Nigeria.

## 2. THEORETICAL FRAMEWORK

Finance affects economic growth, stagnation or even decline in any economic system. Financial resources are mobilized and channeled to economic activities by financial institutions or financial intermediaries who channel these resources from surplus economic units to deficit economic units. In doing this, they evolve appropriate structures necessary for the intermediation functions which they perform. Various studies have shown that there is a strong and positive relationship between the financial sector and economic development. According to Porter (1966) the level of financial institution development is the best indicator of general economic development. Furthermore, Goldsmith (1969) contends that financial institution development is of prime importance for real development because the financial superstructure in the form of both primary and secondary securities accelerates economic growth and improves economic performance to the extent that it facilitates the migration of funds to the best user.

This refers to the place in the economic system where the funds will yield the highest social return. In his empirical study, as reported by Nzotta (2004) Goldsmith calculated the values of the financial interrelation ratio (FIR), the ratio of all financial instruments at a given time, to the value of the national wealth. He found that the ratios for developing countries were far lower than those of developed countries and concluded that because the development of financial institutions affects development, the low level of development of the financial superstructure affects development negatively.

The views above are supported by the development hypothesis theory. The supporters of this theory believe that the lack of a developed financial infrastructure restricts economic growth. Thus, the focus of policy at each point in time should be to ensure that the financial system operates efficiently such that the real sector will receive the necessary support. The acceptance of the hypothesis theory made economic theorists to conclude that a measure of intervention is important and in fact necessary for meaningful growth. Various policies should thus be put in place to encourage and promote the activities of financial institutions in this regard. This gave rise to the financial repression theory. This theory is usually associated with the work of McKinnon (1973) and Shaw (1973). The implication of their studies is that financial development would contribute most significantly to economic growth and reduce level of poverty, if monetary authorities did not interfere in the operations of financial institutions and the financial infrastructure generally.

The studies by Mckinnon and Shaw observed that financial repression is correlated with sluggish growth in developing countries. Such economies, according to Nnanna and Dogo (1998) are typically characterized by high and volatile inflation and distorted interest and exchange rate structures, low savings and investments and low level of financial intermediation, as interest rates do not reflect the cost of capital- Various studies investigated the relationship between financial system structure and development and the level of economic growth in Nigeria. These studies include Akinlo and Akinlo (2007) Ayadi et al (2007), Ndebbio (2004) Oyejide (1998) Edo (1995), Ogun (1986). The studies relied on money market indicators and established a positive and significant relationship between financial development and economic development.

From the literature, we can summarize the reasons why financial inclusion and financial deepening is poor in developing countries as including the low level of foreign direct investments, shallow capital market, distortions in interest rate, and weak association between financial openness and financial deepening. Ju and Wei, (2007), recently the low level of corporate governance in financial institutions has also sustained poor financial deepening in the system. (Nzotta, 2006). Moreover, in a world of friction less capital markets and various levels of country risks, the least developed financial system is completely by-passed by international investment flows. Thus, a developing country with poor financial infrastructure may experience large outflows of foreign capital, Yan (2007).

### **3. SOURCES OF DATA AND METHOD OF ANALYSIS**

The data used in this study were sourced from the Central Bank of Nigeria publications and those of the Bureau of statistics. The data was for the period 1965 – 2010. The period chosen for the study encompasses the phases of the major reforms in the financial system and the period of consolidation of the banking and insurance systems in Nigeria. The equation specified for the study was estimated using Error Correction Model (ECM) to test for the short run dynamism. The model assists us to determine the T values and the F values which were used to test the significance of the equation specified. The data used in the regression runs are as shown in Tables 1. These are absolute aggregates for each variable obtained for the period 1965 – 2010 (45 years). The introduction of the error term variable seeks to capture the influence of political instability on the operations of financial institutions and this to a large extent influences financial deepening. To test for stationarity and co-integration, we adopted the Sargan – Bhargavan Durbin – Watson (SBDW) test. It is important to note that the present of co-integration in a model means that long-run equilibrium relationship exists among the non-stationery variables.

#### **3. 1. The Model Specification**

A model is identified if it is in a unique statistical form enabling unique estimates of the parameters to be subsequently estimated from a sample data. In this study, we shall adopt six explanatory variables which are: Financial Deepening (MGDP) as a dependent variable, while Prime lending rates (PLRA), Financial Savings/GDP ratio (FSGD), value of Cheques Cleared to GDP ratio (CHQG), value of Cheques Cleared to Money Supply (CHQM2) the Rate of Inflation (INFCP), Credit to Private Sector (CPSGDP), are all explanatory variables.

This model is given as:

$$MGDP_i = f(PLRA_i, FSGD_i, CHQGi, CHQM2_i, INFCP_i, CPSGD_i, + \xi) \quad (1)$$

The model above can be reduced to the linear logarithmic equation form thus:

$$\text{Log}(MGDP_i) = C_0 + C_1 \text{Log}(PLRA_i) + C_2 \text{Log}(FSGD_i) + C_3 \text{Log}(CHQGi) + C_4 \text{Log}(CHQM2_i) + C_5 \text{Log}(INFCP_i) + C_6 \text{Log}(CPSGD_i) + \xi \quad (2)$$

### 3. 2. Estimation Techniques

Since the data employed a time series, it is therefore imperative to use OLS method of estimation. In order to avoid spurious result, there is need to test for the order of integration of individual series by conduction unit of root test for stationarity. According to Engle and Granger, (1987), a non-stationary is said to be integrated of order  $d$  if it can be made stationary by differencing it  $d$  times; expressed as  $X_t \sim I(d)$ . After confirming firstly that the series are generated by first order autoregressive process, i.e. AR (1), of the form:

$$Y_t = y_{t-1} + \xi_t \quad (3)$$

Because of the possible autocorrelation, the above equation is extended to allow for AR (n) process yielding Augmented Dickey Fuller (ADF) test of the term:

$$\Delta y_t = \beta y_{t-1} + \sum_{i=1}^n \beta_i \Delta y_{t-i} - i + \xi_t \quad (4)$$

Where  $y_t$  is a particular variable;  $\beta$  is parameter;  $\xi_t$  is error terms assumed to be white noise i.e.  $\xi_t \text{ IID } (0, \sigma^2)$ . Philips-Perron (PP) (Philips and Perron, 1988) unit root test is used to test for the stationarity of the variables. If the variables of concern are all stationary at level, then, it is imperative to run an OLS regression of the variables on levels and test for cointegration using Johansen test.

The existence of cointegration allows for analysis of the short run dynamic model that identifies adjustment to the long run equilibrium relationship through the error correction model representation. It however, follows that cointegration is a necessary condition for error correction model to hold (see Engle and Granger, 1991). The next step is the adoption of the short run model with an error correction mechanism of the form:

$$\Delta Y_t = \alpha_0 L \Delta Z_t + \alpha_2 (Y-Z)_{t-1} + \xi_t \quad (5)$$

For real  $Y_t$  is the vector of variables that cointegrate with each growth equation. Alternatively, equation (6) can be written as:

$$\Delta Y_t = \alpha_0 L \Delta Z_t + \alpha_2 ECM_{t-1} + \xi_t \quad (6)$$

Where  $L$  is the lag operator and  $ECM$  is the time series of residuals from the cointegrating vector. Equation (6) incorporates a corrective mechanism by which previous disequilibria in the relationship between financial deepening and the level of one or more of its determinants are permitted to affect the current change in financial deepening.

Hence, under this justification, equation (6) can then be reduced to a parsimonious equation through the elimination of insignificant terms and the imposition of constraints that hold a reasonable approximation (see Adam 1992 and Boughton 1991). The result of re-parameterization of this equation is then used in further analysis.

#### **4. FINDINGS AND DATA INTERPRETATION**

##### **4. 1. Analysis of Trends in Financial Deepening Between 1965-2010**

The main features of the financial deepening aggregates during the 45 year period, as evidenced from Figure 1 were as presented below. The financial deepening index of MSGDP increased by 11.1 % from 1965 to 1969 but witnessed a slow increment from 1970. However, there was a rise recorded by 62.2 % from 1974 to 1987. This declined to 77.8 % from 1988 to 1997 before rising to 26.7 % by 2002. The aggregate moved down to 17.8 % by 2005 and up again to 42.2 % by 2008. The trends above clearly show that the financial deepening index did not experience any dramatic changes during the period. This is despite the various reforms introduced from 1986 to 2010 which should have a positive effect on financial deepening in Nigeria.

Although the number of financial institutions especially banks, increased following the 1986 reforms, over time, these institutions could not sustain a high level of intermediation in the system. The presence of weak and terminally distressed banks especially in the 1990s up to 2003 accounted for the low level of financial deepening index during the period: This necessitated the banking consolidation reforms introduced in 2004/2005. A high level of financial deepening should sustain and provide basis for moderate lending rates in any economy. Curiously, the prime lending rates had remained very high.

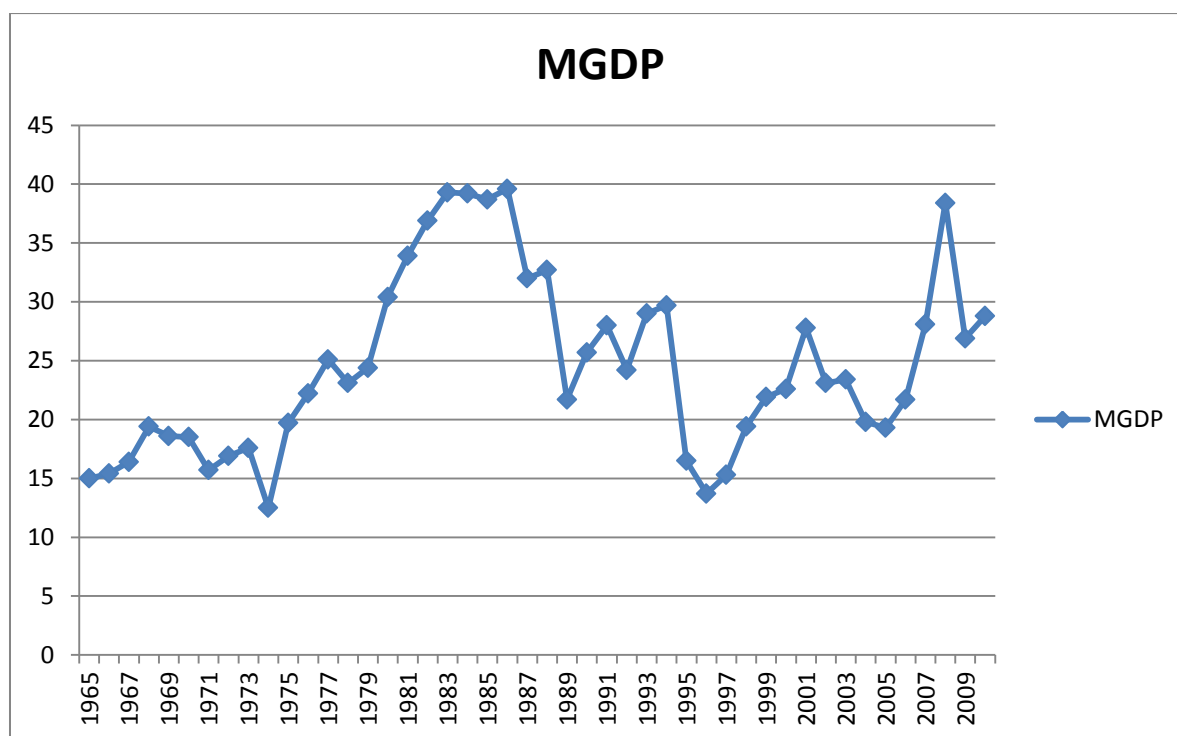
The major reason for this according to Nzotta (2004) includes technical in solvency and presence of weak banks, the underdeveloped nature of the financial system, the lack of interest elasticity, un-responsiveness of the rates to changes in business cycle and the huge fiscal deficits by the public sector over the years. We also note that the rate of inflation in Nigeria also remained fairly stable between 1997 and 2010.

The ratio of currency outside banks to money supply progressively declined between 1997 and 2010. The ratio moved from 30.4 in 1979 down to 15.2 in 2007. This shows a higher level of banking habits in the country. The decline had been more pronounced between 2005 and 2010 following the increased use of Automated Teller Machines and plastic money in the country.

The ratio of cheques to money supply witnessed dramatic changes between 2003 and 2010. The ratio moved from 145.4 in 2002, up to 449.5 in 2003 and the level of financial savings ratio (FSGDP) declined between 1986 and 1993. The bank consolidation of 2005 enhanced the operations of banks and also financial sector development and this affected the assets of banks.

In summary, from the analysis above it is evident that there is relatively a low level of deepening of the financial market in Nigeria during the period of the study.

However, the level of financial deepening has been enhanced just after major reforms in the financial system. It is also important to note that the reforms and policy thrusts could have impacted more positively on the system if the issue of systemic crisis had reduced considerably.



**Fig. 1.** Showing Analysis of Trends in Financial Deepening Between 1965-2010.

#### 4. 2. Augmented Dickey Fuller & Philips Perron Unit Root Tests

The Augmented Dickey-Fuller (ADF) test developed by Dickey and Fuller (1979 and 1981) and the Phillips-Perron (PP) tests were used to test for the time series properties of the study variables. The results are presented in Table 2. From the table, it can be seen that all the series in the sample are integrated of order one, or are I(1) series.

**Table 1.** Showing the ADF & PP Unit Root Test.

Variables	ADF Test			Philips Perron Test		
	ADF Values	Mackinnon Critical Values	Order of Integration	ADF Values	Mackinnon Critical Values	Order of Integration
MGDP	-5.2846*	-3.6104	I(1)	-5.2846*	-3.6104	I(1)
PLRA	-4.1590*	-3.6104	I(1)	-4.1721*	-3.6104	I(1)
FSGD	-1.17882*	-3.6155	I(1)	-12.1666*	-3.6155	I(1)
CHQG	-6.1163*	-3.6104	I(1)	-6.1108*	-3.6104	I(1)
CHQM2	-5.46128*	-3.6055	I(1)	-5.4568*	-3.6055	I(1)
INFCP	-3.2079**	-3.605593	I(1)	-3.1108*	-3.6055	I(1)
CPSGD	-4.2137*	-3.7206	I(1)	-4.1924*	-3.9102	I(1)

*SOURCE: Computed by the Researcher, 2012*

*Note: One, two and three asterisk denotes rejection of the null hypothesis at 1%, 5% and 10% respectively based on Mackinnon critical values*



### 4. 3. Cointegration Test Result

The Johansen and Juselius (1990) method is adopted in testing for cointegration. Following this approach, the optimal lag length of VAR that should inform the conduct of the cointegration test was determined. The test results presented in Table 1 above show that all the five different information criteria considered, i.e., Akaike Information Criterion (AIC), Schwarz Information Criterion, Hannan-Quinn Criterion (HQ), Final Prediction Error (FPE) and Sequential modified LR test statistic (LR), suggest the optimal lag length as 1. For the cointegration test, the existence of cointegrating relationship between pairs of variables, namely, Financial Deepening (MGDP), Prime lending rates (PLRA), Financial Savings/GDP ratio (FSGD), value of Cheques Cleared to GDP ratio (CHQG), value of Cheques Cleared to Money Supply (CHQM2) the Rate of Inflation (INFCP), Credit to Private Sector (CPSGDP).

**Table 2.** Showing VAR Lag Order Selection Criteria.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1014.549	NA	3.46e+11	46.43406	46.71791	46.53932
1	-835.7869	292.5202	9.76e+08	40.53577	42.80656	41.37789
2	-713.5671	161.1079*	41509057*	37.20760*	41.46532*	38.78657*

\* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

### 4. 4. OLS Regression Result

The Table 3 presents the summary results of the empirical financial deepening regression estimates for the specified equation.

The coefficient of ECM (-1) is statistically significant and negative which provides further evidence that financial deepening (MGDP) cointegrates with the explanatory variables. The results obtained from the dynamic model indicate that the overall coefficient of determination ( $R^2$ ) shows that the equation has a good fit with 0.950343 meaning that 95 % change in the dependent variable (MGDP) is caused by the independent variables (PLRA, INFCP, FSGD, CPSGD, CHQM2 and CHQG).

The higher the  $R^2$ , the higher the goodness of fit the higher the goodness of fit the higher the reliability of the model. As the adjusted ( $R^2$ ) tends to purge the influence of the number of included explanatory variables, the ( $R^2$ ) of 0.928083 shows that having removed the influence of the explanatory variables, the model is still of good fit, hence, in terms of the goodness of fit we can say that the test is fair.

The Durbin Watson (D.W) statistics of 2.231408 as it is significantly within the bench mark, we can conclude that there is no auto-correlation or serial correlation in the model specification. The prob. (F- statistic) shows that the model is significant at 1 %, 5 %, and 10 %. The implication is that the variables in the equation are useful for explaining the level of financial deepening that has occurred between 1965 - 2010.

**Table 3.** Model Summary.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.139102	0.267420	-0.520166	0.6069
D(MGDP(-1))	0.421807	0.074674	5.648639	0.0000
D(PLRA)	0.125645	0.043444	2.892112	0.0072
D(PLRA(-2))	-0.133096	0.048303	-2.755440	0.0100
D(INFCP)	0.599343	0.068242	8.782605	0.0000
D(INFCP(-1))	-0.383608	0.078952	-4.858721	0.0000
D(INFCP(-2))	0.194110	0.066921	2.900607	0.0070
D(FSGD)	0.110108	0.024069	4.574639	0.0001
D(CPSGD)	-0.018823	0.004225	-4.455371	0.0001
D(CHQM2)	-0.121294	0.022440	-5.405254	0.0000
D(CHQM2(-1))	0.059208	0.033085	1.789574	0.0840
D(CHQM2(-2))	0.080393	0.038747	2.074838	0.0470
D(CHQG)	73.81289	9.484780	7.782246	0.0000
ECM(-1)	-0.845319	0.109630	-7.710682	0.0000
R-squared	0.950343			
Adjusted R-squared	0.928083			
Durbin-Watson stat	2.231408			

The implication of the findings is that although the financial structure had enhanced the level of financial savings and thus affected the level of financial deepening positively, the financial system has not been efficient in resource allocation evidently. Here, the process of intermediation in the system is not efficiently done. Although the financial system has not grown tremendously in size and structure this has not been translated in the provision of loans and credits especially to the real sector of the economy.

**Table 4.** Descriptive Statistics on Bank Capital on Liquidity Creation.

	MGDP	INFCP	PLRA	FSGD	CPSGD	CHQM2	CHQG
MEAN	24.52609	15.17826	40.78174	44.40537	220.8965	19.34652	0.109065
MEDIAN	23.10000	13.80000	3.080000	32.60500	105.1850	15.02000	0.090000
MAX	39.60000	33.80000	192.6000	187.8800	1002.760	141.8000	0.339000
MIN	12.50000	5.100000	0.200000	0.770000	3.290000	6.000000	0.050000
STD DEV	7.645113	6.696265	59.70826	50.91833	298.5673	22.67173	0.052772
KURTOSIS	2.315240	2.799718	3.203516	3.619862	3.807016	20.19895	8.990544
PROBABILITY	0.215901	0.164352	0.001790	0.002071	0.000146	0.000000	0.000000

The summary of the statistics used in this empirical study is presented in Table 2 above. As can be observed from the Table, the mean value of Financial Deepening is 24.52609, Rate of Inflation is 15.17826, Prime Lending Rate is 40.78174, Financial Savings is 44.40537, Credit to Private Savings is 220.8965, Cheque cleared to Money Supply is 19.34652, Cheque to cleared to GDP is 0.109065. The kurtosis value is positively low. These suggest that the variables are skewed to the right.

## 5. CONCLUSION AND RECOMMENDATION

This study therefore concludes that once access to financial institutions improves, inclusion affords several benefits to the consumer, regulator and the economy alike. Establishment of an account relationship can pave the way for the customer to avail the benefits of a variety of financial products, which are not only standardised, but are also provided by institutions that are regulated and supervised by credible regulators, and are hence safer. The bank accounts can also be used for multiple purposes, such as, making small value remittances at low cost and making purchases on credit. Furthermore, the regulator benefits, as the audit trail is available and transactions are conducted transparently in a medium that can be monitored. The economy benefits, as greater financial resources become transparently available for efficient intermediation and allocation, for uses that have the highest returns. In other words, the single gateway of a banking account can be used for several purposes and represents a beneficial situation for all the economic units in the country.

From the findings, this study therefore recommends that there is an urgent need to sustain a higher level of macroeconomic stability in Nigeria, reduce the high incidence of non performing credits ensure that private sector credits are channeled to the real sector of the economy, enhance the level of corporate governance in the financial system and also strengthen risk management in the financial system. Finally the supervision and regulation of banks should be strengthened, with a focus on risk management. This will enhance financial inclusion to strengthen financial deepening and provide resources to the banks in order to expand credit delivery. Thus, financial inclusion will lead to financial development in our country which will help to accelerate economic growth.

## References

- [1] Adams C. S., *African Econometric Research Consortiun* 15 (1992) 1-52.  
AERC Special Paper
- [2] Akinlo A. E., Olufisayo Akinlo, *Journal of Social and Economic Development* 1 (2007).
- [3] Ayida O. E ., *International Journal of Finance and Economics* 19 (2007).
- [4] Boughton J. M., *IMF Staff Papers* 38 (1991) 1-32.
- [5] *Central Bank of Nigeria Annual Report and Accounts*, Various Issues Statistical Bulletin, Various Issues.
- [6] Chibba M., *World Economics* 8(3) (2007) 111-129.
- [7] Edo S. E., *Economic and Financial Review* 1 (12) (1995).

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- [8] Engle R. F., Granger C. W. J., *Econometrica* 55 (1987) 251-276.
- [9] Goldsmith R., *Financial Structure and Development* New Haven, Yale University Press, 1969.
- [10] Ju and Wei, *A Solution to the Two Paradoxes of International Capital Flows*, (2007)
- [11] Levine R., *Journal of Financial International* 11 (4) (2002) 398-428.
- [12] Mckinnon R., *Money and Capital in Economic Development*, Washington D. C. Brooking Institute, 1973
- [13] Ndebbio J. E. U., *African Economic Research Consortium* 142 (2004).
- [14] Nzotta S. M., *Money, Banking and Finance, Theory and Practice Owerri*. Hudson Jude Publishers, 2004.
- [15] Ogun O. D., *Nigerian Journal of Economic and Social Studies* 28(2) (1986).
- [16] Oyejide T. A., *Nigerian Journal of Economic and Social Studies* 28(2) (1994).
- [17] Porter R., *Journal of Development Studies* 1(4) (1966).
- [18] Shaw Edward, *Financial Deepening in Economic Development*, London, Oxford University Press, 1973.
- [19] *United Nations Organization World Summit*, The United Nations Millennium Development Goals, 2005.
- [20] World Bank. *Press Review*. 24 August, 2007.
- [21] World Bank. *Finance for All?* Washington DC: World Bank, 2008).
- [22] World Bank Group. *Catalyzing the Future: An Inclusive and Sustainable Globalization*, (2007)
- [23] *Presentation by Robert Zoellick*, President, World Bank Group, at the Annual Meeting of the Board of Governors; 22 October.
- [24] Yan E., *Why Isn't Financial Deepening Happening in Developing Countries*, 2007, [www.worldbank.org](http://www.worldbank.org)

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